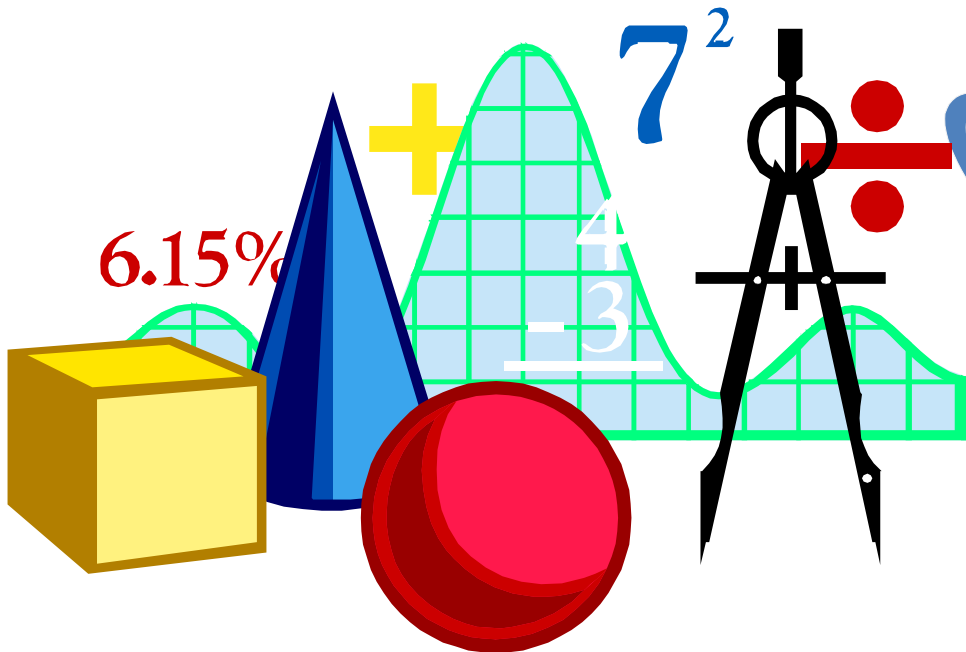


MATHEMATICS FOR PRIMARY THREE FIRST TERM





Name :

School :

Grade : **Class :**


Teacher's name :







Chapter One




1 THE PATTERN



Choose the correct answer:




(1)  ...


a.  b.  c. 




(2)  ...


a.  b.  c. 




(3)  ... 

a.  b.  c. 

(4)  ...

a.  b.  c. 

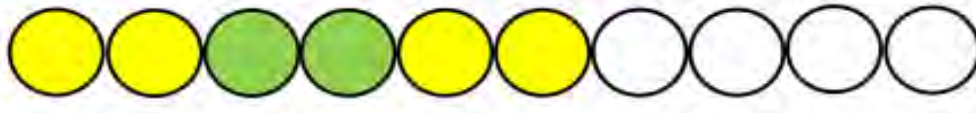
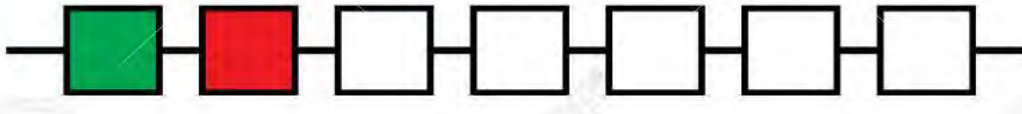
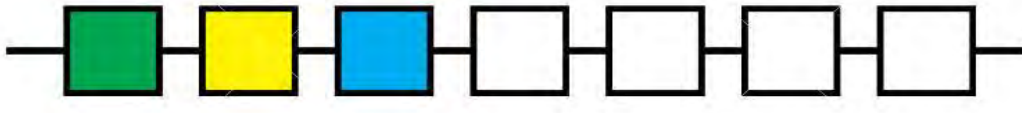
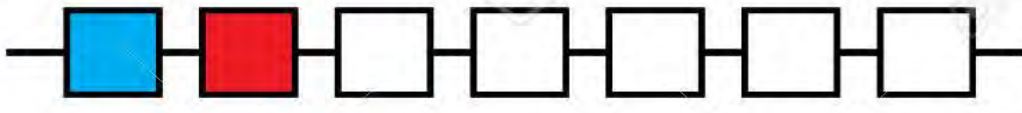
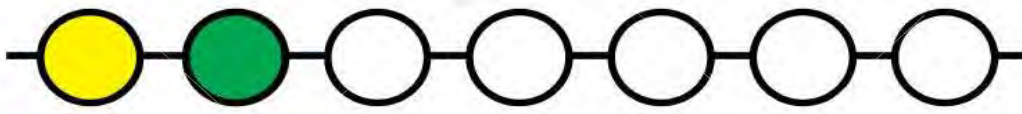
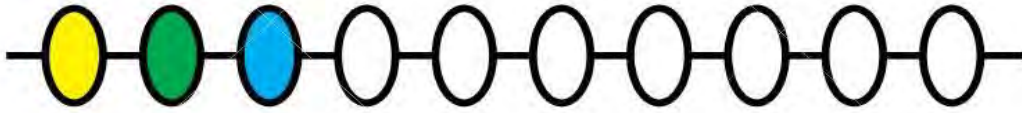
(5)  ...

a.  b.  c. 

Choose the correct answer:

- (1) 10 20 30 40 50 60 ...
 a. 50 b. 20 c. 70
- (2) 5 10 15 20 25 30 ...
 a. 35 b. 40 c. 45
- (3) 2 4 6 8 10 12 ...
 a. 13 b. 14 c. 15
- (4) 20 30 40 50 60 70 ...
 a. 71 b. 75 c. 80
- (5) 21 22 23 24 25 ...
 a. 20 b. 26 c. 30
- (6) 1 3 5 7 9 ...
 a. 10 b. 11 c. 12
- (7) 34 44 54 64 74 ...
 a. 75 b. 76 c. 84
- (8) 90 80 70 60 50 ...
 a. 60 b. 40 c. 20
- (9) 71 61 51 41 31 ...
 a. 21 b. 22 c. 23

Complete the pattern using colors:

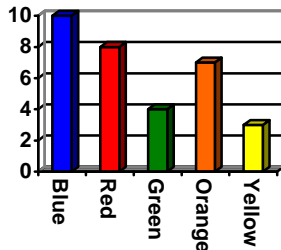


2 REPRESENTING DATA

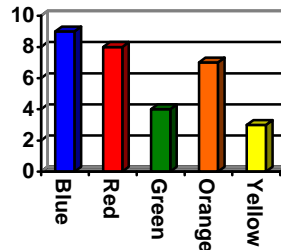
Choose the correct bar graph:

(1)

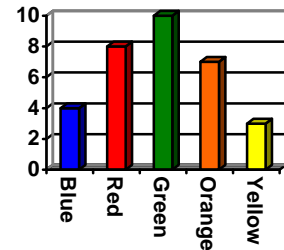
Favorite color	Blue	Red	Green	Orange	Yellow
No. of students	10	8	4	7	3



a.



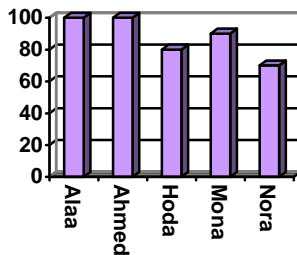
b.



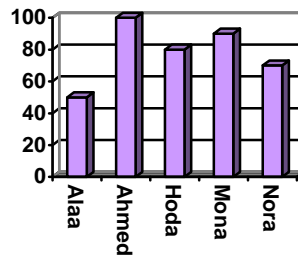
c.

(2)

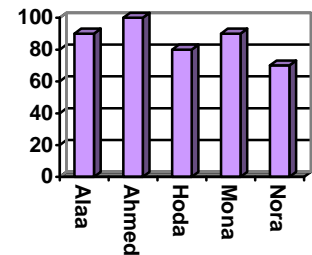
Name	Alaa	Ahmed	Hoda	Mona	Nora
Marks	90	100	80	90	70



a.



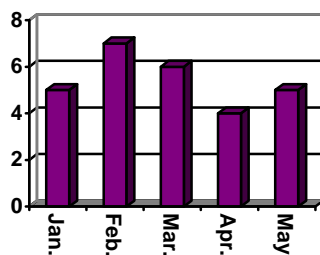
b.



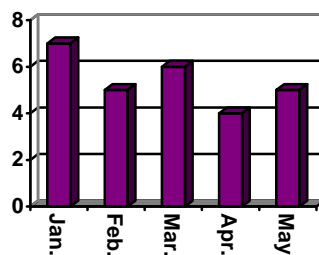
c.

(3)

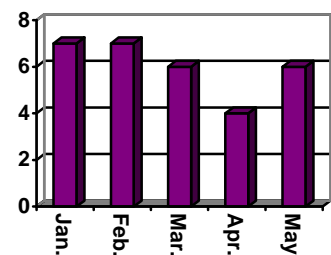
Month	Jan.	Feb.	Mar.	Apr.	May
Points	7	5	6	4	5



a.



b.



c.

LINE PLOTS

Create the line plot using the set of given numbers:

(1)

5	6	4	7	8	9	8	7
6	5	4	4	5	4	4	6



(2)

1	2	3	2	5	6	5	7
10	1	1	4	9	1	4	8



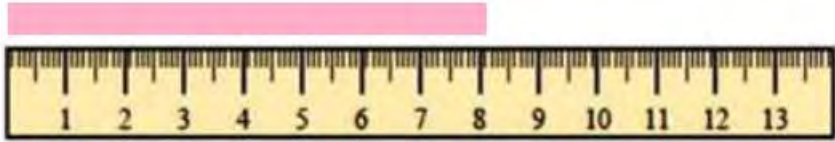
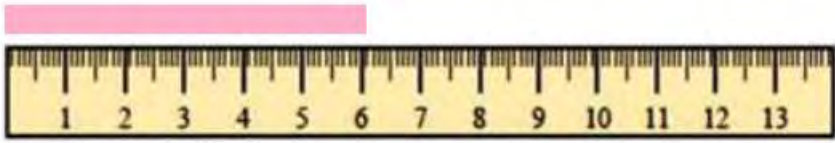







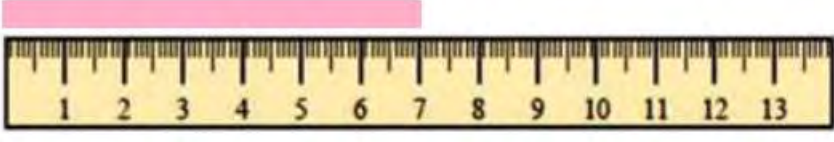
(3)

20	22	22	23	23	23	23	24
25	26	27	28	28	28	29	29









3 MEASURING LENGTH

Complete the table:

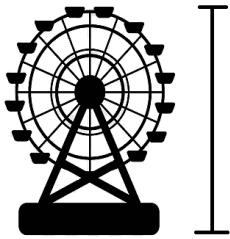
No.	Bars	length
(1)		..... cm
(2)		..... cm
(3)		..... cm
(4)		..... cm
(5)		..... cm
(6)		..... cm
(7)		..... cm
(8)		..... cm
(9)		..... cm
(10)		..... cm

Look at the images below, and then complete the table:

IMAGES	METERS OR CENTIMETERS?
	
	
	
	
	
	

Choose the best answer:

(1) Ferris Wheel



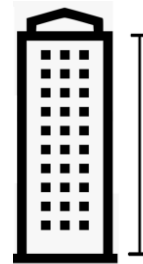
- a. 30 centimeters
- b. 3 meters
- c. 20 meters

(2) Screw



- a. 20 centimeters
- b. 1 meter
- c. 3 centimeters

(3) Building



- a. 300 centimeters
- b. 3 meters
- c. 30 meters

(4) Flash Memory



- a. 6 centimeters
- b. 30 centimeters
- c. 20 centimeters

(5) Horse



- a. 90 centimeters
- b. 2 meters
- c. 30 centimeters

(6) Key



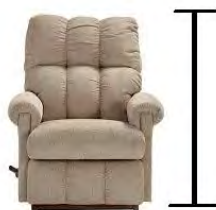
- a. 15 centimeters
- b. 5 centimeters
- c. 5 meter

(7) Notebook



- a. 5 centimeters
- b. 5 meters
- c. 25 centimeters

(8) Recliner



- a. 30 centimeters
- b. 1 meter
- c. 50 centimeters

(9) Can of Beans



- a. 120 centimeters
- b. 3 meters
- c. 10 centimeters

Choose the suitable answer:

1. The yarn is about 5 centimeters long. Circle the best estimate for the length of the crayon.



10 centimeters

15 centimeters

20 centimeters

2. The string is about 12 centimeters long. Circle the best estimate for the length of the straw.



3 centimeters

7 centimeters

11 centimeters

3. The rope is about 8 centimeters long. Circle the best estimate for the length of the paper clip.



2 centimeters

4 centimeters

8 centimeters

4. The pencil is about 11 centimeters long. Circle the best estimate for the length of the chain.



6 centimeters

10 centimeters

13 centimeters

5. The hair clip is about 7 centimeters long. Circle the best estimate for the length of the yarn.



10 centimeters

17 centimeters

22 centimeters

Circle the better estimation:

1.



15 cm long 50 cm long

2.



1 m tall 10 m tall

3.



3 cm long 3 m long

4.



10 m tall 10 cm tall

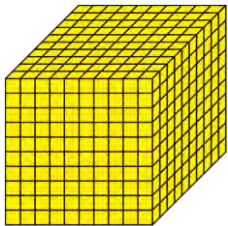
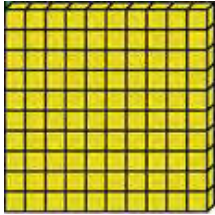


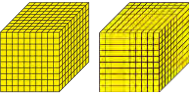
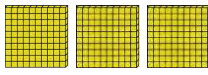



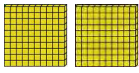
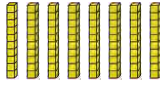

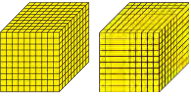
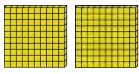
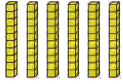


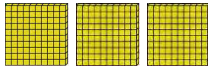



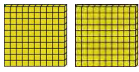


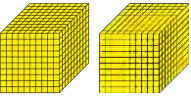



Estimate the length then complete:

Find the real object.	Measure.
<p>chair</p>	<p>_____ centimeters</p> <p>_____ meters</p>
<p>teacher's desk</p>	<p>_____ centimeters</p> <p>_____ meters</p>
<p>wall</p>	<p>_____ centimeters</p> <p>_____ meters</p>



Chapter Two

1 THOUSANDS

Write the correct number:

Thousands	Hundreds	Tens	Ones	The number
				
				2354
			
			
			
			
			

The value and the place value

<p>I am in the hundred thousands place</p>  <p>My value is 200 000</p>	<p>I am in the ten thousands place</p>  <p>My value is 40 000</p>	<p>I am in the thousands place</p>  <p>My value is 1 000</p>	<p>I am in the hundreds place</p>  <p>My value is 900</p>	<p>I am in the tens place</p>  <p>My value is 80</p>	<p>I am in the ones place</p>  <p>My value is 7</p>
---	--	---	--	---	--

Write the value and the place value of the red digit:

The number	The place value	The value
245 136	Thousands	5 000
368 132
703 201
300 109
623 871
36 950
79 456
9 234
652 348
14 369
258 963
1 965
700 000
150 000
784 596
451 263
102 000

Complete the Table:

Standard form	Expanded form
245 136 =	200 000 + 40 000 + 5000 + 100 + 30 + 6
368 132 =	.....
703 201 =	.....
300 109 =	.....
623 871 =	.....
36 950 =	.....
79 456 =	.....
9 234 =	.....
3 001 =	.....
..... =	600 000 + 50 000 + 2 000 + 300 + 40 + 8
..... =	10 000 + 4 000 + 300 + 60 + 9
..... =	200 000 + 8 000 + 900 + 3
..... =	1 000 + 900 + 60 + 5
..... =	700 000 + 200 + 4
..... =	100 000 + 50 000 + 90
..... =	20 000 + 900 + 8
..... =	600 000 + 20 000 + 3000

Complete using (<), (>) or (=):

23 456 ○ 33 456

34 901 ○ 21 479

10 478 ○ 9 876

124 200 ○ 321 100

987 143 ○ 976 143

801 900 ○ 800 000

65 243 ○ 60 000 + 5000 + 200 + 40 + 3

32 469 ○ 90 000 + 1000 + 400 + 60 + 9

93 241 ○ 800 000 + 20 000 + 300 + 20 + 1

503 236 ○ 500 000 + 3000 + 200 + 30 + 7

600 500 ○ seven hundred thousand

Order from smallest to greatest: ↑

1 426 178 , 320 198 , 102 329 , 258 987

..... , , ,

2 536 279 , 92 358 , 120 350 , 471 084

..... , , ,

3 321 273 , 900 000 , 400 329 , 200 900

..... , , ,

4 321 957 , 91 300 , 85 618 , 300 987

..... , , ,



Order from greatest to smallest: ↓

1 426 178 , 320 198 , 102 329 , 258 987

..... , , ,

2 536 279 , 92 358 , 120 350 , 471 084

..... , , ,

3 321 273 , 900 000 , 400 329 , 200 900

..... , , ,

4 321 957 , 91 300 , 85 618 , 300 987

..... , , ,

2 ARRAYS



Number of rows:

Number of apples in each row:

Total number of apples:



Number of rows:

Number of cupcakes in each row:

Total number of cupcakes:



Number of rows:

Number of biscuits in each row:

Total number of biscuits:



Number of rows:

Number of donuts in each row:

Total number of donuts:



Number of rows:

Number of cupcakes each row:

Total number of cupcakes:



Number of rows:

Number of mangoes in each row:

Total number of mangoes:



Number of rows:

Number of eggs in each row:

Total number of eggs:



Number of rows:

Number of donuts in each row:

Total number of donuts:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:



Number of columns:

Number of stars in each column:

Total number of stars:

Example:

Example:



Repeated Addition (+) $3 + 3 + 3 = 9$

Multiplication (×) $3 \times 3 = 9$

Comparison $\underline{9}$ $<$ $\underline{15}$
 (My product) (Partner's product)

Round One:

Repeated Addition (+)

Multiplication (×)

Comparison $\underline{\quad}$ \bigcirc $\underline{\quad}$
 (My product) (Partner's product)

Round Two:

Repeated Addition (+)

Multiplication (×)

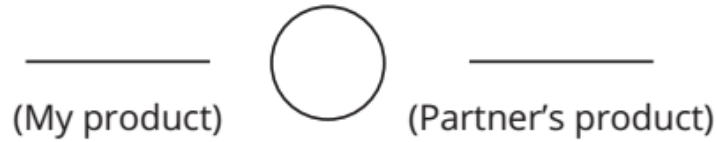
Comparison $\underline{\quad}$ \bigcirc $\underline{\quad}$
 (My product) (Partner's product)

Round Three:

Repeated Addition (+)

Multiplication (×)

Comparison

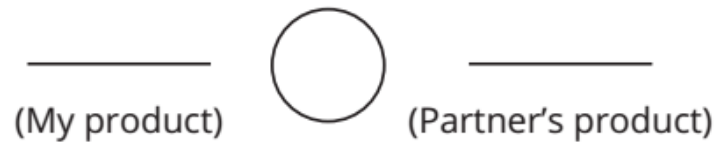


Round Four:

Repeated Addition (+)

Multiplication (×)

Comparison



Round Five:

Repeated Addition (+)

Multiplication (×)

Comparison



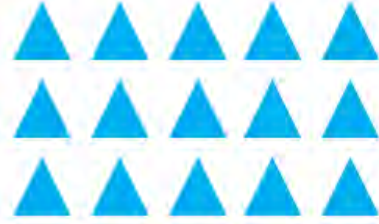


Number of rows: _____

Number of columns: _____

Total number of triangles: _____

$$\frac{\quad}{\text{rows}} \times \frac{\quad}{\text{columns}} = \frac{\quad}{\text{product}}$$



Number of rows: _____

Number of columns: _____

Total number of triangles: _____

$$\frac{\quad}{\text{rows}} \times \frac{\quad}{\text{columns}} = \frac{\quad}{\text{product}}$$



Number of rows: _____

Number of columns: _____

Total number of hearts: _____

$$\frac{\quad}{\text{rows}} \times \frac{\quad}{\text{columns}} = \frac{\quad}{\text{product}}$$

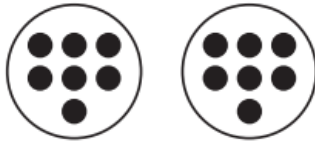


Number of rows: _____

Number of columns: _____

Total number of hearts: _____

$$\frac{\quad}{\text{rows}} \times \frac{\quad}{\text{columns}} = \frac{\quad}{\text{product}}$$

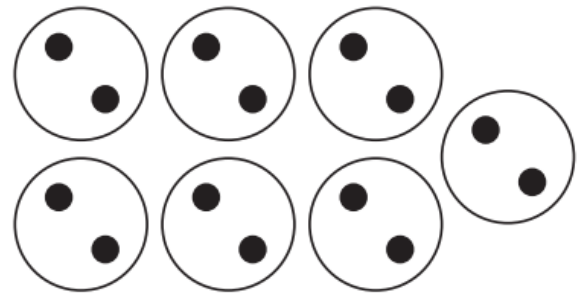


Number of circles: _____

Number of dots: _____

Total number of dots: _____

$$\begin{array}{ccc} \underline{\quad\quad} & \times & \underline{\quad\quad} = \underline{\quad\quad} \\ \text{circles} & & \text{dots} \quad \text{product} \end{array}$$

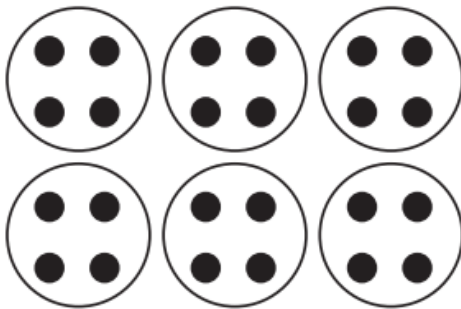


Number of circles: _____

Number of dots: _____

Total number of dots: _____

$$\begin{array}{ccc} \underline{\quad\quad} & \times & \underline{\quad\quad} = \underline{\quad\quad} \\ \text{circles} & & \text{dots} \quad \text{product} \end{array}$$

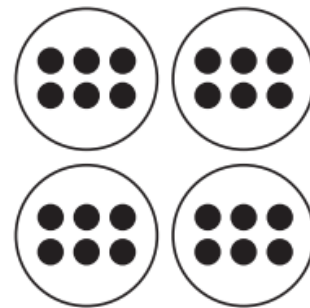


Number of circles: _____

Number of dots: _____

Total number of dots: _____

$$\begin{array}{ccc} \underline{\quad\quad} & \times & \underline{\quad\quad} = \underline{\quad\quad} \\ \text{circles} & & \text{dots} \quad \text{product} \end{array}$$



Number of circles: _____

Number of dots: _____

Total number of dots: _____

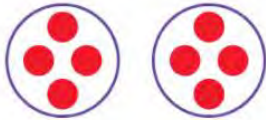
$$\begin{array}{ccc} \underline{\quad\quad} & \times & \underline{\quad\quad} = \underline{\quad\quad} \\ \text{circles} & & \text{dots} \quad \text{product} \end{array}$$

1. Write a multiplication sentence for the array.



Write a multiplication sentence for the model. Then use the Commutative Property of Multiplication to write a related multiplication sentence.

2.



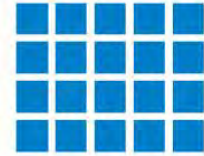
$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

3.



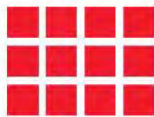
$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

4.



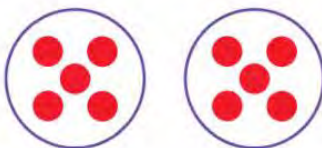
$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

5.



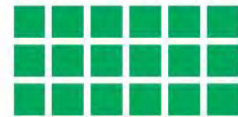
$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

6.



$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

7.



$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \end{array}$$

Chapter Three

1 APPLICATIONS

Example problem: Farha went to the store to buy rolls for a big family dinner. At the store, she bought 4 bags of rolls. Each bag contained 5 rolls. How many rolls did Farha buy?

Work Space:

Multiplication equation: _____

1. On Samira's walk home she saw 6 cars. If each car has 4 wheels, how many wheels did she see in all?

Work Space:

Multiplication equation: _____

2. Manal brought 6 bags of cookies to school. Each bag had 3 cookies in it. How many cookies were there all together?

Work Space:

Multiplication equation: _____

3. Malek runs 3 miles each day. How many miles does he run in 7 days?

Work Space:

Multiplication equation: _____



4. A bag of oranges holds 4 oranges. How many oranges are in 8 bags?

Work Space:

Multiplication equation: _____



5. It takes a rocket 7 seconds to travel one kilometer. How many seconds will it take to travel 4 kilometers?

Work Space:

Multiplication equation: _____



6. Each pack of pencils contains 8 pencils. How many pencils are in 3 packs?

Work Space:

Multiplication equation: _____



2 MULTIPLICATION

Use the 120 Chart below to complete the following:

- Color the multiples of 2 _____ (color stated by teacher).
- Color the multiples of 3 _____ (color stated by teacher).
- Respond to the prompts at the bottom of the page.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

List the first 10 multiples of 2.

_____ , _____ , _____ , _____ , _____ , _____ , _____ , _____ , _____ , _____

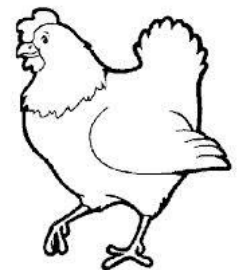
List the first 10 multiples of 3.

_____ , _____ , _____ , _____ , _____ , _____ , _____ , _____ , _____ , _____

List all of the multiples you found that 2 and 3 share:



TABLE 2



Complete:

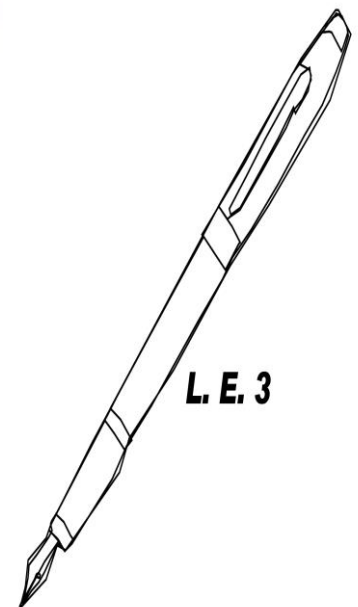
- (a) The number of legs of 2 hens = ... × ... = ...
- (b) The number of legs of 3 hens = ... × ... = ...
- (c) The number of legs of 5 hens = ... × ... = ...
- (d) The number of legs of 8 hens = ... × ... = ...
- (e) The number of legs of 9 hens = ... × ... = ...

TABLE 3



Complete:

- (a) The Price of 2 pens = ... × ... = ...
- (b) The Price of 5 pens = ... × ... = ...
- (c) The Price of 3 pens = ... × ... = ...
- (d) The Price of 7 pens = ... × ... = ...
- (e) The Price of 9 pens = ... × ... = ...
- (f) The Price of 8 pens = ... × ... = ...



Use the 120 Chart to complete the following:

- Color the multiples of 10 _____ (color stated by teacher).

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Write the equations for the multiples of ten. The first two have been done for you.

$10 \times 1 = 10$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times 2 = 20$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times 3 = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times 4 = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

TABLE 10



TABLE 4



TABLE 5



Use the 120 Chart on the previous page to complete the following:

- Color the multiples of 5 _____ (color stated by teacher).
- Write the equations for the multiples of five. The first two have been done for you.

$$5 \times 1 = 5$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times 2 = 10$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times 3 = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times 4 = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$



$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 12 \\ \hline \end{array}$
--	--	--	--	--	--	--	--	--	---	---	---

$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 5 \\ \hline \end{array}$
--	--	--	--	--	--	--	--	--	---	---	---

$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 12 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$
--	--	--	--	---	---	---	--	--	--	--	--

$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 12 \\ \hline \end{array}$
--	--	--	--	--	--	--	---	--	---	--	---

APPLICATION

Directions: Look at each of the clocks below. Determine the time on the analog clock and write the digital time below. Remember that each hour number represents a group of 5 minutes.



_____ : _____



_____ : _____



_____ : _____



_____ : _____

Draw the minute hand on the analog clock.

Round One:



1 : 30

Round Two:



2 : 30

Round Three:



7 : 15

Round Four:



4 : 35

Round Five:

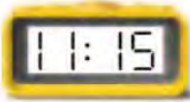


10 : 45

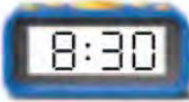


Draw the minute hand to show the time.

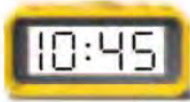
1.



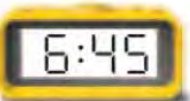
2.



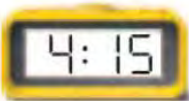
3.



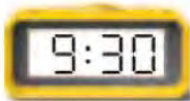
4.



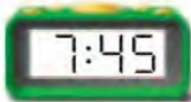
5.



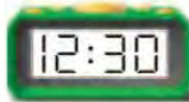
6.



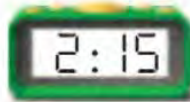
8.



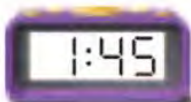
9.



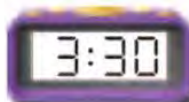
10.



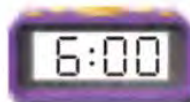
11.



12.



13.



Look at the clock hands. Write the time.

1.



2.



3.



4.



5.



6.



Look at the clock hands. Write the time.

7.



8.



9.



10.



11.



12.



TABLE 6



TABLE 7



TABLE 8



TABLE 9



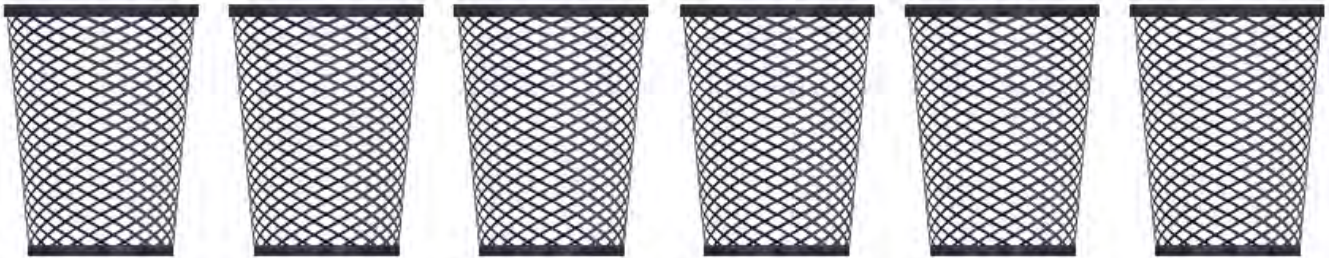
1. There are 16 fish that need to be placed in 4 bowls. Each bowl must hold the same number of fish. How many fish should be put into each bowl? Draw a picture in the bowls below to solve the problem.



2. Sameh is preparing gift baskets. He has 20 oranges that need to be divided equally between 5 baskets. Draw a picture in the baskets below to solve the problem.



3. The teacher has 36 crayons to share equally between 6 students. She must place the crayons in the cups below. Draw a picture in the cups below to solve the problem.



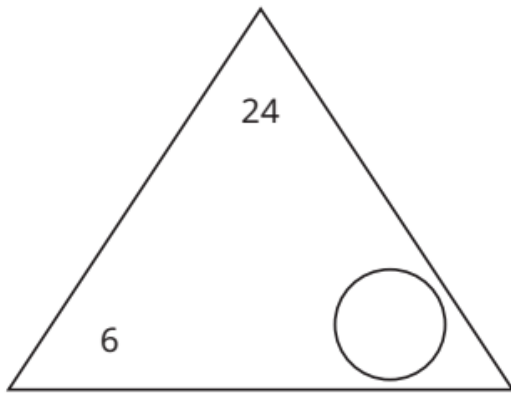
Directions: Draw a mathematical picture to solve.

Each cat needs 2 fish for lunch. How many cats can we feed with 12 fish?





Directions: Find the missing factor in the triangles below. Then write the four equations that go with the fact family. Use the counters to help you.

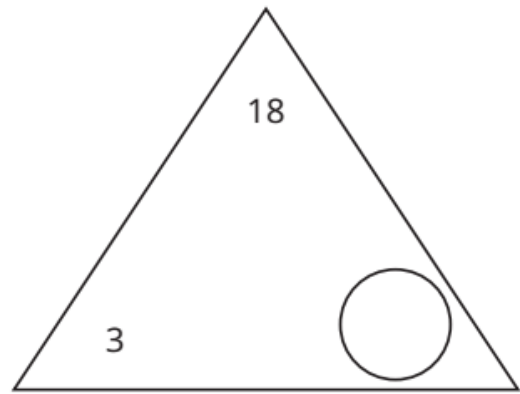


$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

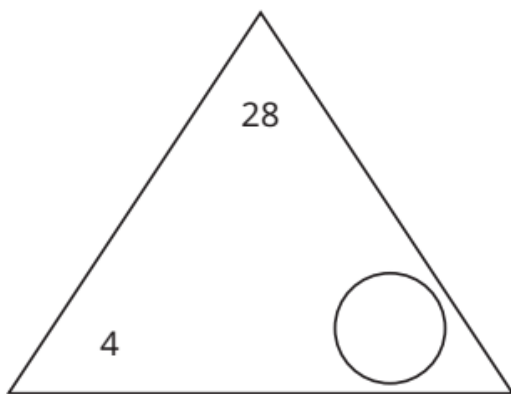


$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

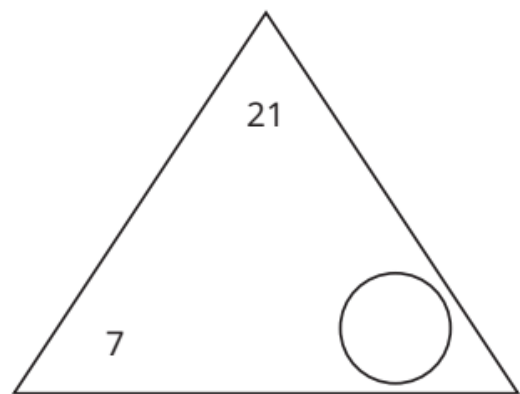


$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$



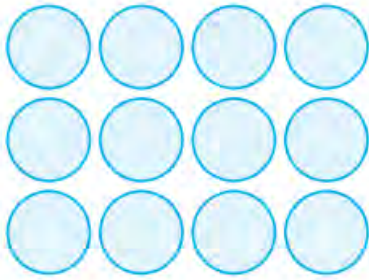
$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \times \\ \hline \end{array} \times \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

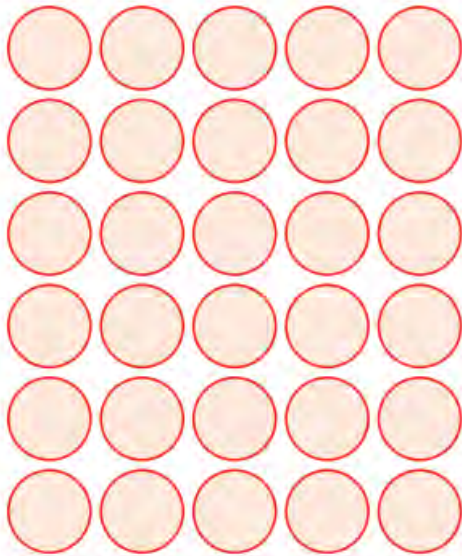
$$\begin{array}{r} \div \\ \hline \end{array} \div \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

CHALLENGE: Describe each of these arrays using one multiplication equation and one division equation.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



Chapter Four

1 POLYGONS

Classify According to the number of vertices:



Category Title: Four Vertices Square Rectangle	Category Title:
Category Title:	Category Title:
Category Title:	Category Title:



Directions: Find the missing factor by rolling the die or choosing a number card. Record the missing factor in one of the problems below and then solve. When finished, circle the facts that were the easiest for you to solve.

Mystery Multiplication

$1 \times \underline{\quad} = \underline{\quad}$

$2 \times \underline{\quad} = \underline{\quad}$

$3 \times \underline{\quad} = \underline{\quad}$

$4 \times \underline{\quad} = \underline{\quad}$

$5 \times \underline{\quad} = \underline{\quad}$

$6 \times \underline{\quad} = \underline{\quad}$

$7 \times \underline{\quad} = \underline{\quad}$

$8 \times \underline{\quad} = \underline{\quad}$

$9 \times \underline{\quad} = \underline{\quad}$

$10 \times \underline{\quad} = \underline{\quad}$

$11 \times \underline{\quad} = \underline{\quad}$

$12 \times \underline{\quad} = \underline{\quad}$

Quadrilaterals are named by their sides and their angles.

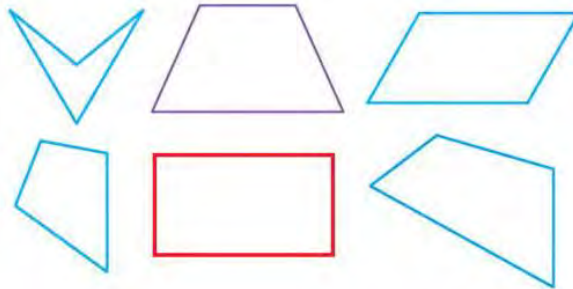


Describe quadrilaterals.

quadrilateral

_____ sides

_____ angles



ERROR Alert

Some quadrilaterals cannot be classified as a trapezium, rectangle, square, or rhombus.

trapezium

at least _____ pair of opposite sides that are parallel
lengths of sides could be the same

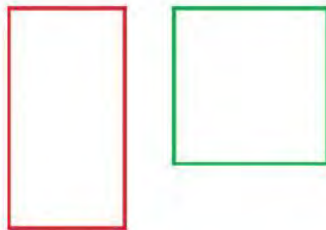


rectangle

_____ pairs of opposite sides that are parallel

_____ pairs of sides that are of equal length

_____ right angles



square

_____ pairs of opposite sides that are parallel

_____ sides that are of equal length

_____ right angles



rhombus

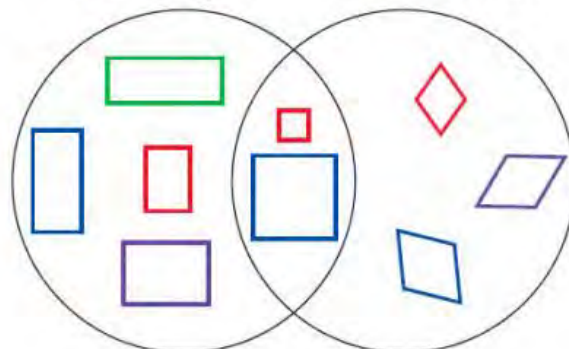
_____ pairs of opposite sides that are parallel

_____ sides that are of equal length



Rectangles

Rhombuses



Circle all the words that describe the quadrilateral.



rectangle
rhombus
square
trapezium



rhombus
quadrilateral
square
rectangle



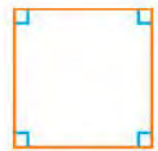
rectangle
rhombus
trapezium
quadrilateral



rectangle
trapezium
quadrilateral
rhombus



rectangle
rhombus
trapezium
square



quadrilateral
square
rectangle
rhombus



Circle all the words that describe the quadrilateral.

1.



square
rectangle
rhombus
trapezium

2.



square
rectangle
rhombus
trapezium

3.



square
rectangle
rhombus
trapezium



Directions: Find the missing factor by rolling the die or choosing a number card. Record the missing factor in one of the problems below and then solve. When finished, draw a rhombus around the fact that was the most challenging and a trapezium around the easiest fact.

Mystery Multiplication

$$1 \times \underline{\quad} = \underline{\quad}$$

$$2 \times \underline{\quad} = \underline{\quad}$$

$$3 \times \underline{\quad} = \underline{\quad}$$

$$4 \times \underline{\quad} = \underline{\quad}$$

$$5 \times \underline{\quad} = \underline{\quad}$$

$$6 \times \underline{\quad} = \underline{\quad}$$

$$7 \times \underline{\quad} = \underline{\quad}$$

$$8 \times \underline{\quad} = \underline{\quad}$$

$$9 \times \underline{\quad} = \underline{\quad}$$

$$10 \times \underline{\quad} = \underline{\quad}$$

$$11 \times \underline{\quad} = \underline{\quad}$$

$$12 \times \underline{\quad} = \underline{\quad}$$

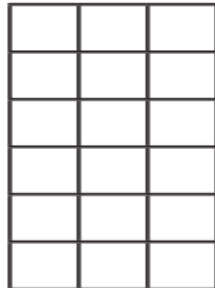
Work space:



2 THE AREA

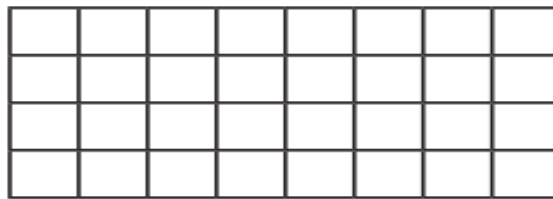
Directions: Determine the area of each rectangle.

Rectangle #1:



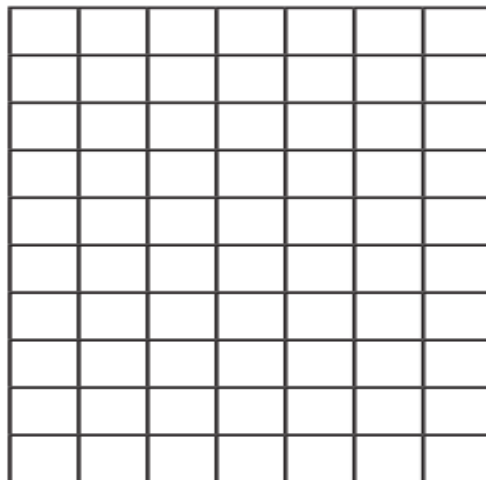
Total area = _____ square units

Rectangle #2:



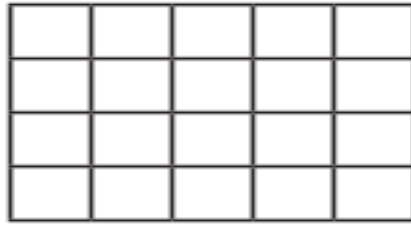
Total area = _____ square units

Rectangle #3:



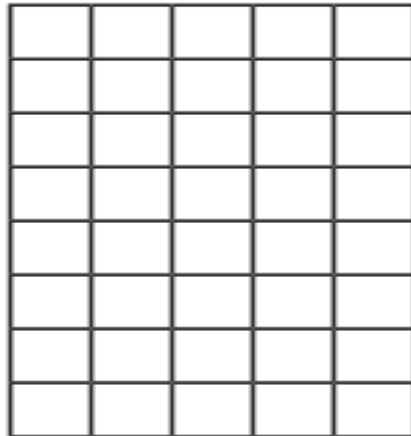
Total area = _____ square units

Rectangle #4:



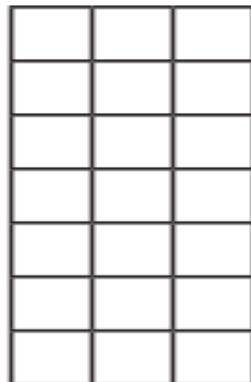
Total area = _____ square units

Rectangle #5:



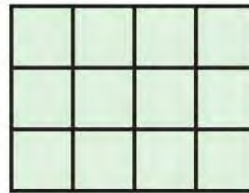
Total area = _____ square units


Rectangle #6:



Total area = _____ square units

1. Look at the figure.



_____ rows of _____ = 

Add. _____ + _____ + _____ = _____

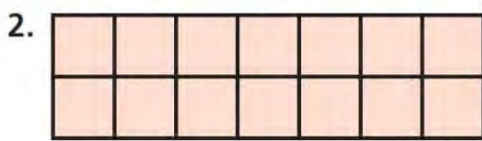
Multiply. _____ × _____ = _____

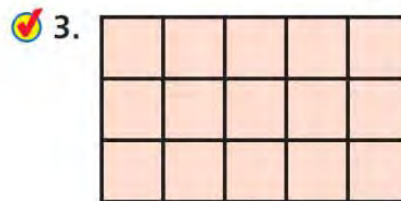
What is the area of the figure?

_____ square units

Find the area of the figure.

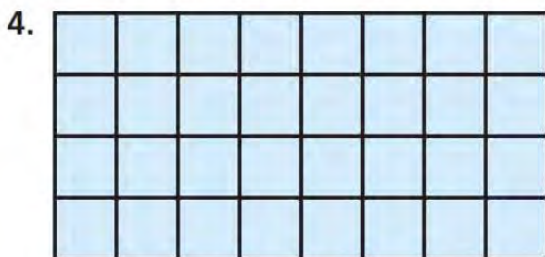
Each unit square is 1 square foot.

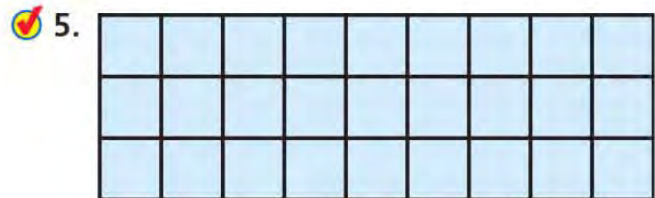




Find the area of the figure.

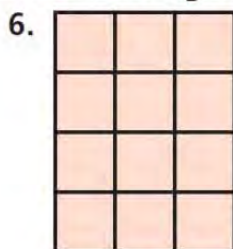
Each unit square is 1 square meter.

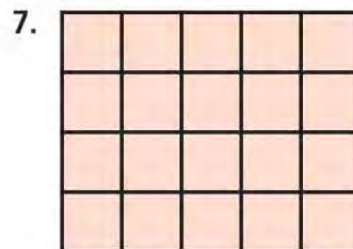




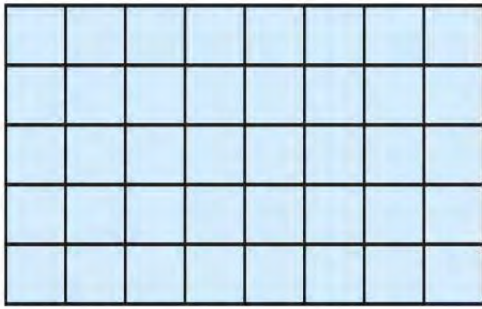
Find the area of the figure.

Each unit square is 1 square foot.

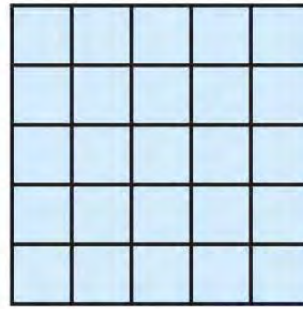




8.



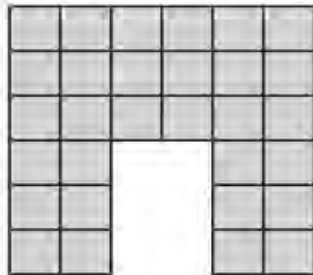
9.



CHALLENGE:

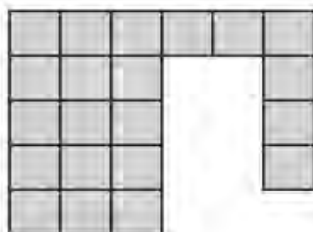
These gardens are not rectangular. Can you find the area anyway?
Show your thinking.

Problem 1:



Total area = _____ square units

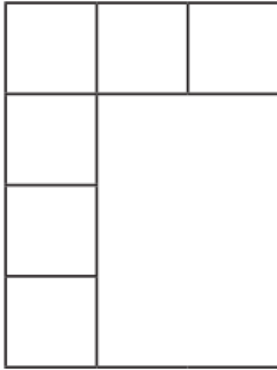
Problem 2:



Total area = _____ square units

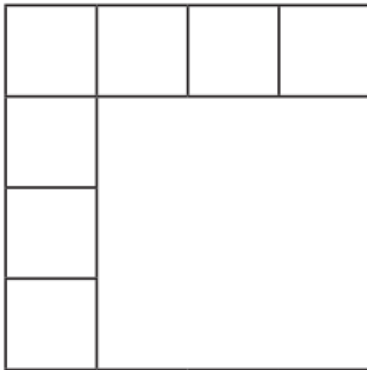
Directions: Determine the total area of each shape.

Rectangle #1:



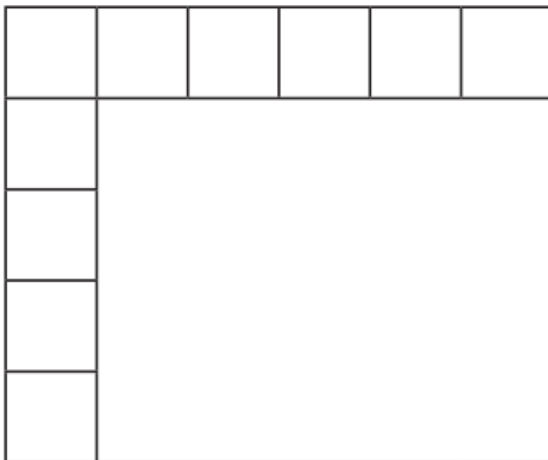
Total area = _____ square units

Rectangle #2:



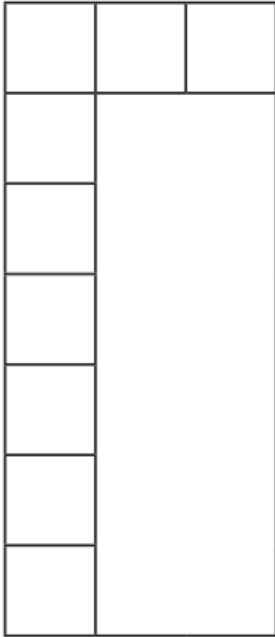
Total area = _____ square units

Rectangle #3:



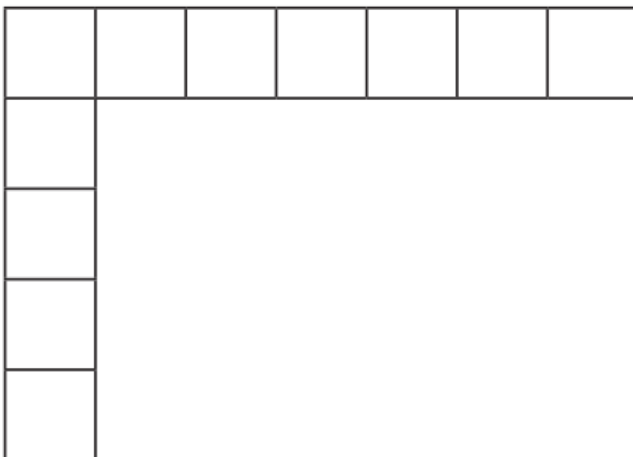
Total area = _____ square units

Rectangle #4:



Total area = _____ square units

Rectangle #5:



Total area = _____ square units

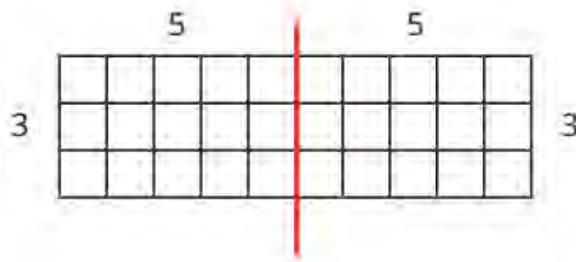
Rectangle #6:



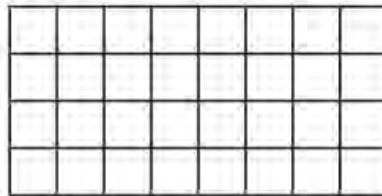
Total area = _____ square units

Directions: Split the arrays below into at least 2 smaller arrays. Label the factors for each part. An example is shown below.

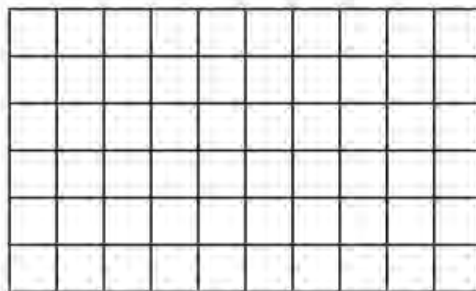
Example



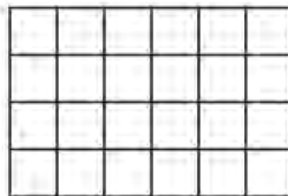
Problem #1



Problem #2

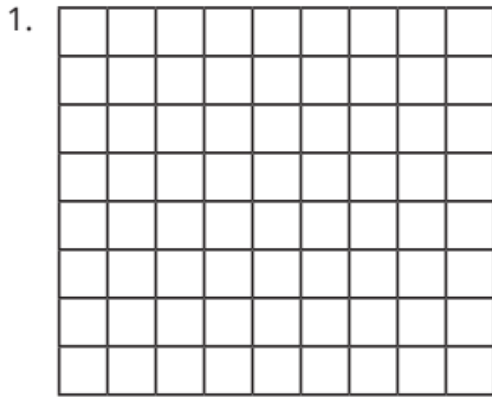


Problem #3



3 DISTRIBUTION PROPERTY

Directions: Break apart the arrays and, using the distributive property, write an equation to show your work.

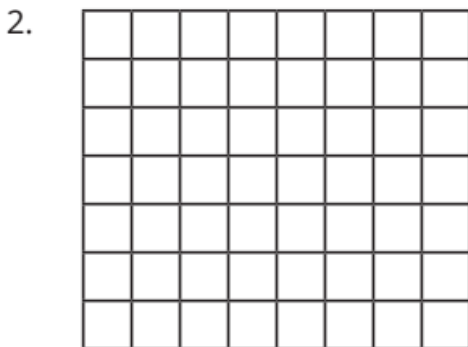


$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \square$$

$$\square + \square = \bigcirc$$

$$8 \times 9 = \underline{\quad}$$

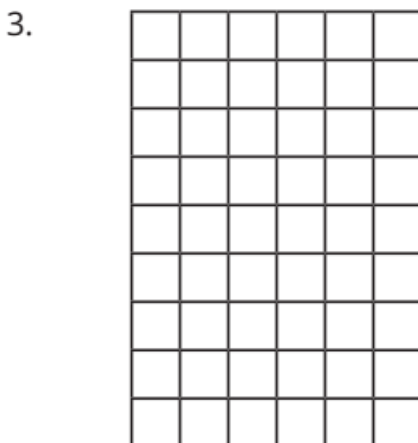


$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \square$$

$$\square + \square = \bigcirc$$

$$7 \times 8 = \underline{\quad}$$



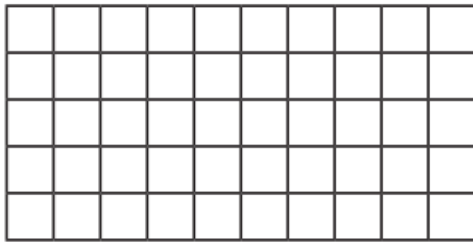
$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \square$$

$$\square + \square = \bigcirc$$

$$9 \times 6 = \underline{\quad}$$

4.



$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \square$$

$$\square + \square = \bigcirc$$

$$5 \times 10 = \underline{\quad}$$

5.



$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \square$$

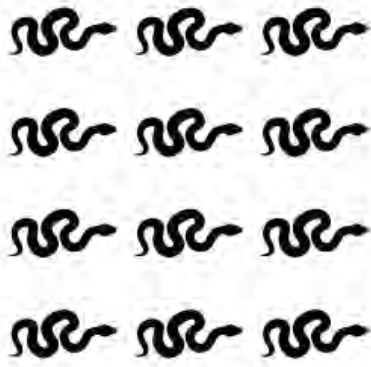
$$\square + \square = \bigcirc$$

$$8 \times 2 = \underline{\quad}$$

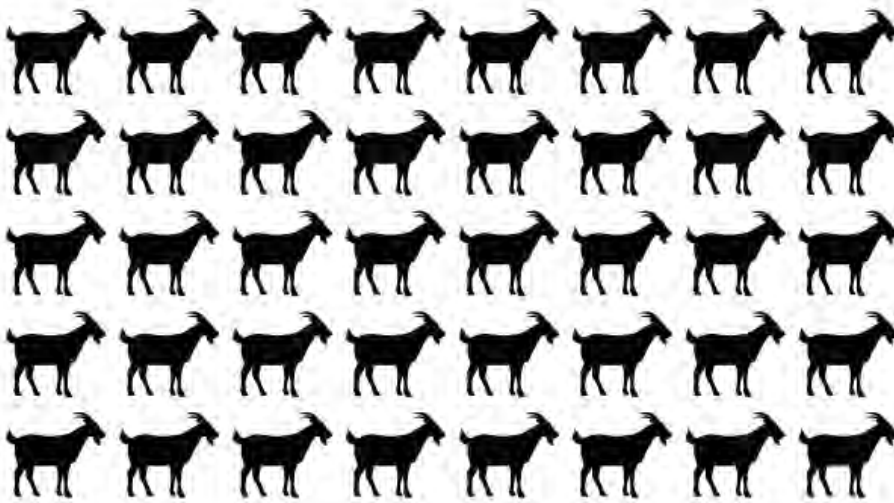
Directions: Break up the following arrays in as many different ways as possible. Use different colors to keep track of your different arrays. Then select the one that is most helpful to you as a mathematician and write the equations that match it in the box.



Equations:



Equations:



Equations:



Equations:

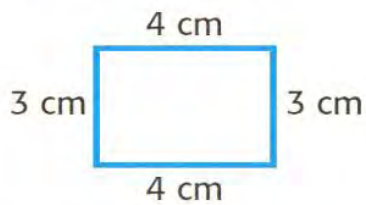


Equations:

Chapter Five

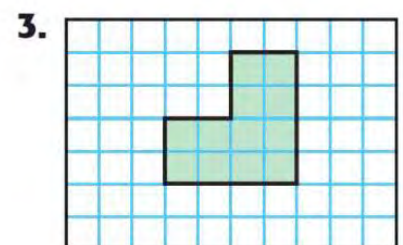
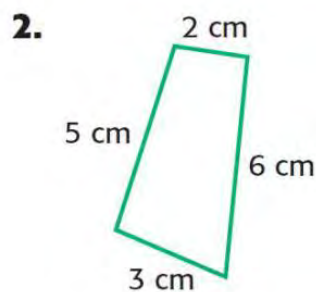
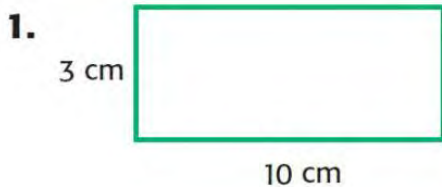
1 PERIMETER

The perimeter of a polygon is the sum of the side lengths.



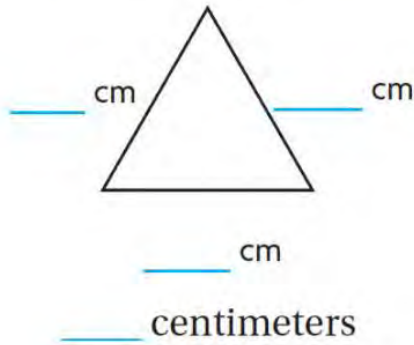
$$\begin{aligned} \text{Perimeter} &= 3 \text{ cm} + 4 \text{ cm} + 3 \text{ cm} + 4 \text{ cm} \\ &= 14 \text{ cm} \end{aligned}$$

Find the perimeter of each figure:

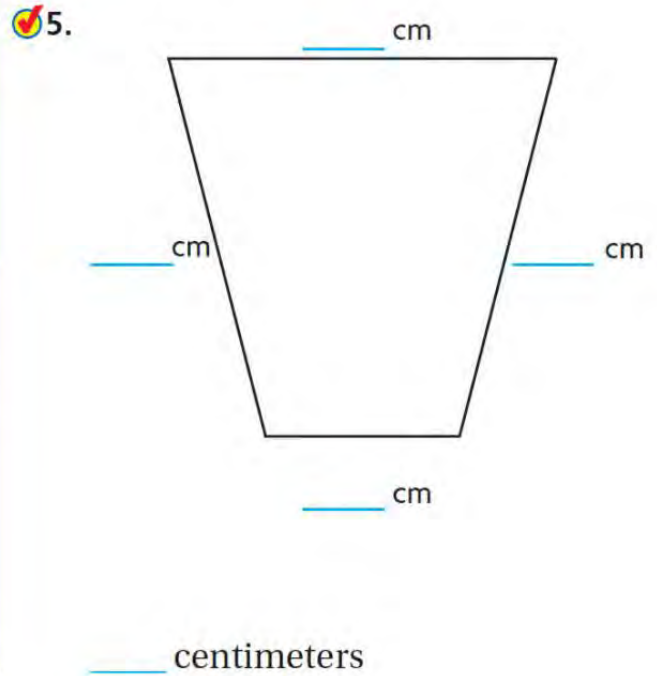
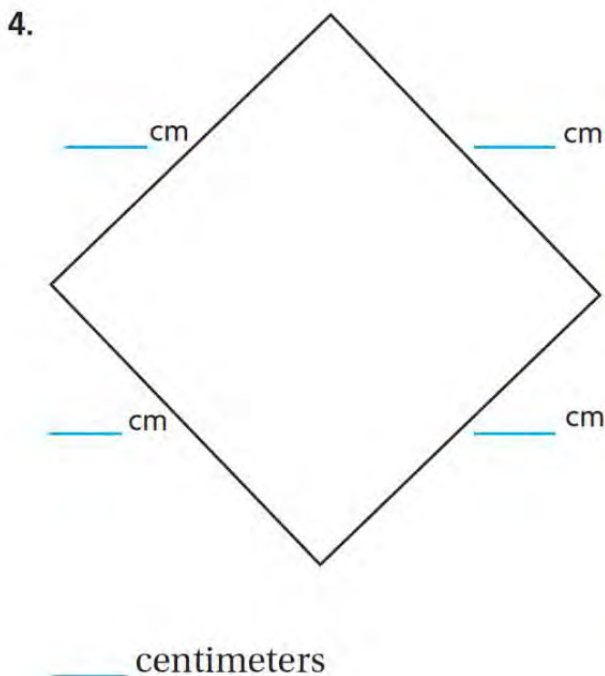
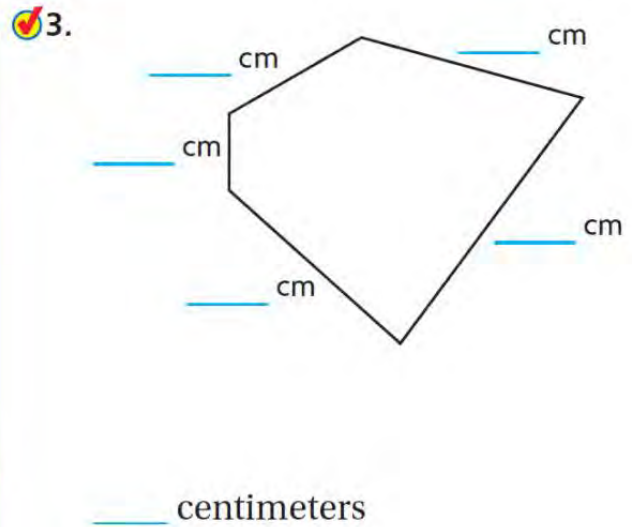
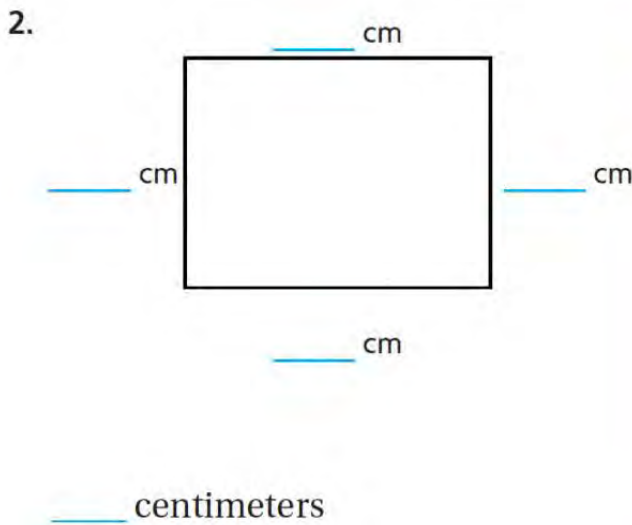


- (1)
- (2)
- (3)

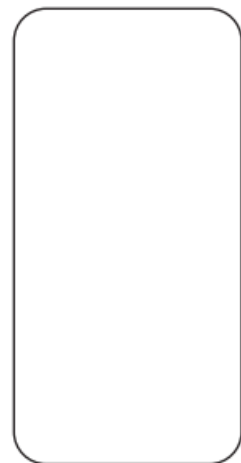
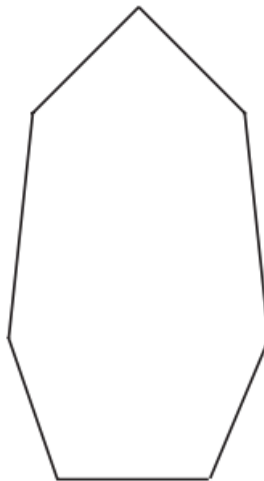
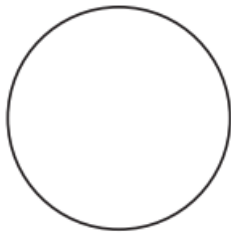
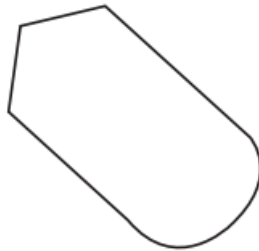
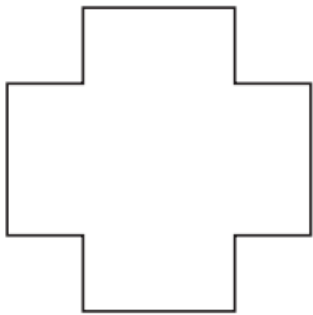
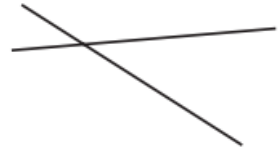
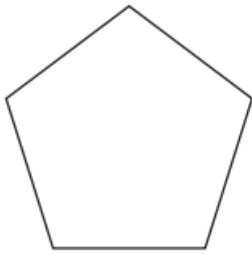
Using your ruler, find the perimeter of each figure:



Think: How long is each side?



Directions: Look at the shapes below. Circle the shapes that are polygons and cross out the shapes that are NOT polygons.



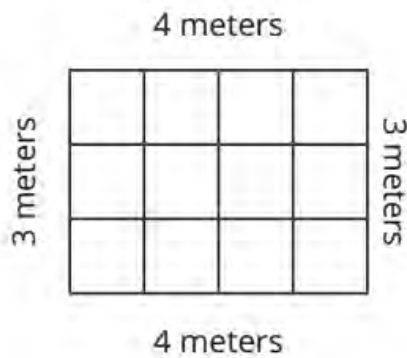
Directions: Work with your Shoulder Partner to solve the perimeter and area problems below. Your teacher will give you additional directions.

Goat Pen



Perimeter = _____ meters Area = _____ square meters

Work Space

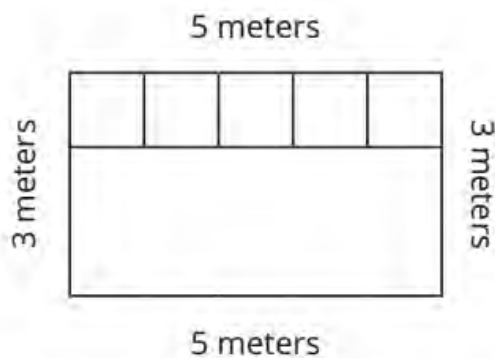


Chicken Pen



Perimeter = _____ meters Area = _____ square meters

Work Space

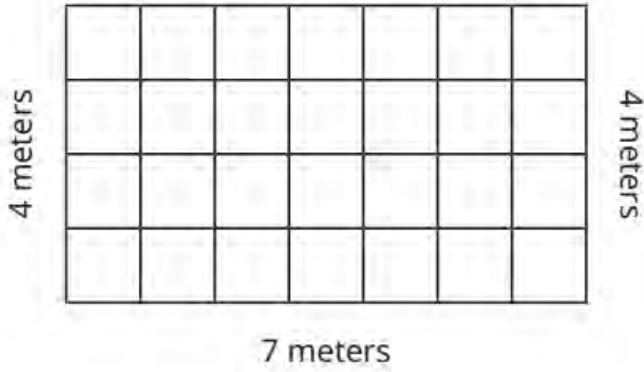


A New Goat Pen



7 meters

Work Space



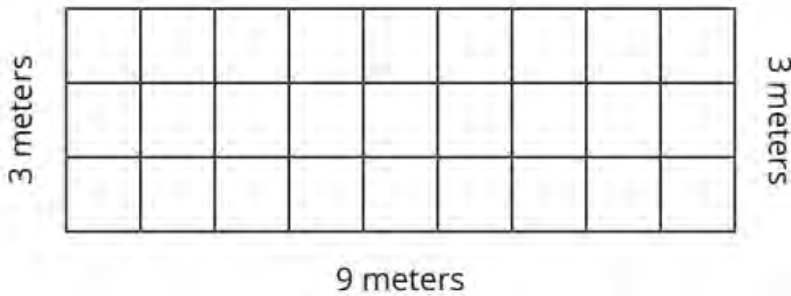
Perimeter = _____ meters Area = _____ square meters

Cattle Pen



9 meters

Work Space



Perimeter = _____ meters Area = _____ square meters

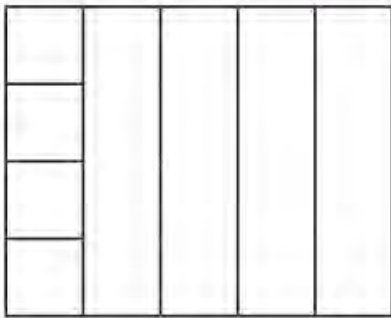


Duck Pen



5 meters

4 meters



5 meters

Work Space

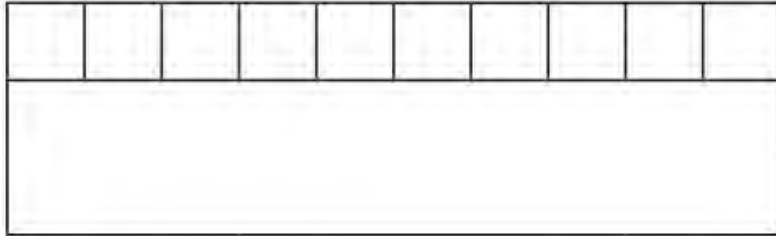
Perimeter = _____ meters Area = _____ square meters

Sheep Pen



10 meters

3 meters



3 meters

10 meters

Work Space

Perimeter = _____ meters Area = _____ square meters



2 DIVISION

1.	$12 \div 3 = \dots\dots\dots$	2.	$12 \div 6 = \dots\dots\dots$
3.	$14 \div 7 = \dots\dots\dots$	4.	$20 \div 4 = \dots\dots\dots$
5.	$15 \div 3 = \dots\dots\dots$	6.	$21 \div 7 = \dots\dots\dots$
7.	$72 \div 9 = \dots\dots\dots$	8.	$36 \div 6 = \dots\dots\dots$
9.	$36 \div 9 = \dots\dots\dots$	10.	$18 \div 9 = \dots\dots\dots$
11.	$27 \div 3 = \dots\dots\dots$	12.	$33 \div 3 = \dots\dots\dots$
13.	$16 \div 2 = \dots\dots\dots$	14.	$20 \div 2 = \dots\dots\dots$
15.	$35 \div 7 = \dots\dots\dots$	16.	$40 \div 5 = \dots\dots\dots$
17.	$55 \div 5 = \dots\dots\dots$	18.	$30 \div 6 = \dots\dots\dots$
19.	$30 \div 3 = \dots\dots\dots$	20.	$45 \div 9 = \dots\dots\dots$

Part 1 Directions: Solve the story problems below. Include a drawing and an equation for each problem. Be sure to label your answers.

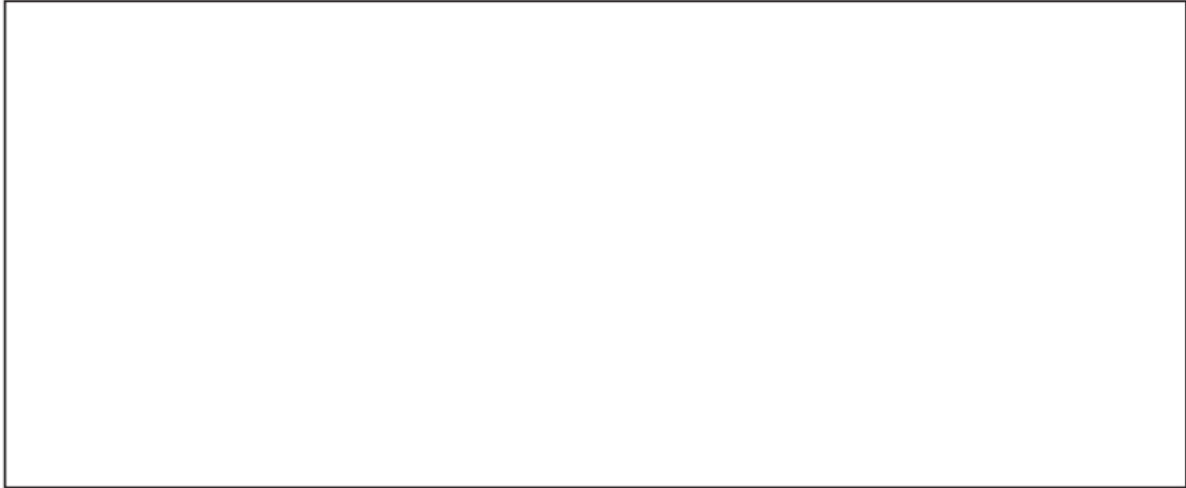
1. Shaimaa is sewing a border on a square baby blanket. The length of the blanket is 45 centimeters and the width is 45 centimeters. How long will the border be?



2. Farouk is building a patio out of tiles. He wants the length of the patio to be 7 tiles across and its width to be 6 tiles. How many tiles will he use in all to build the patio?



3. Omnia wants to put a wooden trim around her window. The window is 4 meters tall and 1 meter wide. How much wood does she need for the trim?



4. A farmer is building a fence around his garden. If the garden is 8 meters long and 3 meters wide, how much fencing does he need to buy?

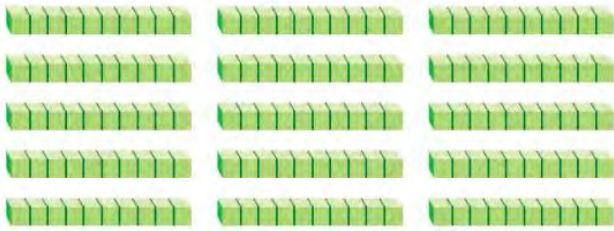


5. A rug is 3 meters long and 2 meters wide. What is the area of the rug?



3 MULTIPLICATION STRATEGIES

MODEL



THINK

$$5 \times 30 = 5 \times \underline{\quad} \text{ tens}$$

$$= \underline{\quad} \text{ tens} = \underline{\quad}$$

So, $5 \times 30 = \underline{\quad}$.

Use the place value to find the product:

- (1) $5 \times 70 = 5 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (2) $4 \times 60 = 4 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (3) $2 \times 80 = 2 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (4) $5 \times 60 = 5 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (5) $3 \times 40 = 3 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (6) $3 \times 70 = 3 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (7) $8 \times 40 = 8 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (8) $6 \times 90 = 6 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (9) $9 \times 10 = 9 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (10) $8 \times 20 = 8 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (11) $7 \times 40 = 7 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (12) $3 \times 50 = 3 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (13) $4 \times 40 = 4 \times \dots \text{ tens} = \dots \text{ tens} = \dots$
- (14) $2 \times 300 = 2 \times \dots \text{ hundreds} = \dots \text{ hundreds} = \dots$
- (15) $3 \times 400 = 3 \times \dots \text{ hundreds} = \dots \text{ hundreds} = \dots$

Chapter Six

Directions: Solve the problems below. Split the multiples of 10 into 10 and the other factor. For example, 40 has the factors 10 and 4.

Example:

$$8 \times 40$$

$$(8 \times 4) \times 10 = 320$$

$$3 \times 90$$

$$(\quad \times \quad) \times 10 =$$

$$4 \times 80$$

$$(\quad \times \quad) \times 10 =$$

$$9 \times 20$$

$$(\quad \times \quad) \times 10 =$$

$$6 \times 30$$

$$(\quad \times \quad) \times 10 =$$

$$8 \times 50$$

$$(\quad \times \quad) \times 10 =$$

$$7 \times 30$$

$$(\quad \times \quad) \times 10 =$$

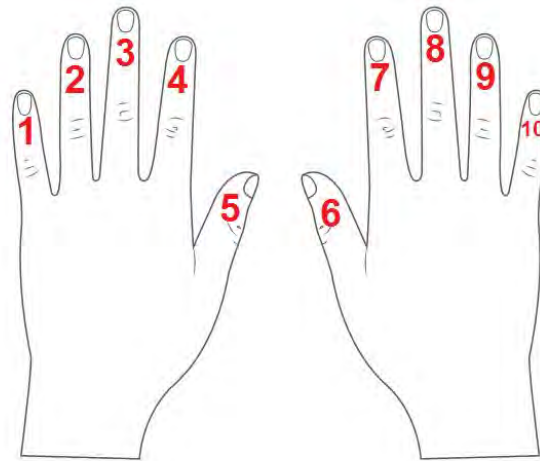
$$6 \times 70$$

$$(\quad \times \quad) \times 10 =$$

$$5 \times 40$$

$$(\quad \times \quad) \times 10 =$$

MULTIPLY BY 9 STRATEGY



Directions: When your teacher gives the signal, solve as many problems as you can in 2 minutes. Use any strategy you learned in Lesson 52.

$9 \times 2 = \underline{\quad}$

$4 \times 9 = \underline{\quad}$

$9 \times 1 = \underline{\quad}$

$9 \times 0 = \underline{\quad}$

$9 \times 10 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$3 \times 9 = \underline{\quad}$

$9 \times 5 = \underline{\quad}$

$9 \times 0 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$9 \times 9 = \underline{\quad}$

$8 \times 9 = \underline{\quad}$

$1 \times 9 = \underline{\quad}$

$9 \times 0 = \underline{\quad}$

$6 \times 9 = \underline{\quad}$

$9 \times 4 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$9 \times 10 = \underline{\quad}$

$9 \times 5 = \underline{\quad}$

$9 \times 8 = \underline{\quad}$

$2 \times 9 = \underline{\quad}$

$9 \times 6 = \underline{\quad}$

$1 \times 9 = \underline{\quad}$

$9 \times 3 = \underline{\quad}$

$9 \times 8 = \underline{\quad}$

$9 \times 6 = \underline{\quad}$

$4 \times 9 = \underline{\quad}$

$10 \times 9 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$9 \times 0 = \underline{\quad}$

PROBLEM	WORK SPACE	SUM
97 + 184		
483 + 201		
823 + 262		
677 + 233		
865 + 337		



Data Table 1: The table below shows the number of students in each grade level in a large school in Cairo. Use this information to answer the questions below.

GRADE	NUMBER OF STUDENTS
P1	272
P2	356
P3	529
P4	487

Questions:

How many students are P1 and P4 all together?

How many students are in P3 and P4 all together?

Fareed says there are more students in P1 and P3 then there are in P2 and P4. Do you agree or disagree? Prove your answer.

Data Table 2: The following table shows the length of some of the world’s longest rivers. Use the information to answer the questions below.

RIVER	APPROXIMATE LENGTH IN KILOMETERS*
Nile	About 6,650 km
Amazon	About 6,400 km
Mississippi	About 3,775 km
Euphrates	About 2,800 km

*Source: Encyclopedia Britannica

Questions:

If you laid the Mississippi and the Amazon out in one straight line, about how many kilometers would it cover?

If you were to paddle the entire length of the Euphrates and the Nile, about how many kilometers would you paddle?

If you were to build a path along the entire length of the Mississippi and the Euphrates, about how long would the path be?

CHALLENGE: Use the world’s rivers chart to determine about how many kilometers you would travel if you decided to raft the length of all four rivers.

THE CAPACITY

Liters and Milliliters

We use the graduated cylinder to measure the liquids

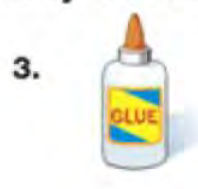
Choose the better estimate for the capacity of each.



3 L or 30 mL



1 L or 5 L



14 L or 14 mL

Choose the unit you would use to measure the capacity of each. Write *mL* or *L*.

4. bathtub

5. a spoon

6. a container of milk

Choose the better estimate for the capacity of each.



100 L or 100 mL



20 L or 2 L



200 mL or 200 L

Choose the unit you would use to measure the capacity of each. Write *mL* or *L*.

10. a pail

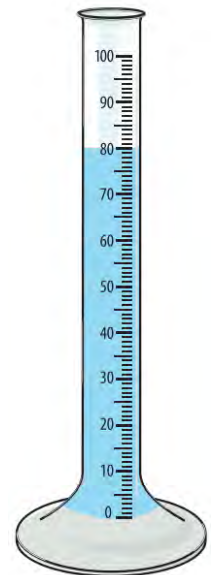
11. a soup can

12. a drinking glass

13. a pond

14. a small vase

15. a watering can



Choose the suitable measuring unit:

Petrol in a car



L

ML

Soda in a can



L

ML

Spoonful of medicine



L

ML

Dishwashing soap



L

ML

Water in a bottle



L

ML

Shampoo in a bottle



L

ML

Juice in a juice box



L

ML

Water in the bathtub



L

ML

Medicine in a syringe



L

ML